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FY2002 Waste Reduction Program Update

This document provides a summary report on the Department of Environmental Protection's (DEP's) and the Executive Office of Environmental Affairs' (EOEA's) waste reduction accomplishments and activities for fiscal year 2002 (July 2001 through June 2002.) Where available, preliminary results from the first half of fiscal year 2003 also are included.

In addition to this FY02 Program Update, DEP and EOEA will publish a full 2001 Progress Report in Summer 2003. This will include calendar year 2001 recycling, composting, disposal, source reduction, and waste reduction data¹, as well as a report on FY03 program accomplishments.

It is important to note that, due to an increased \$15.8 million funding allocation from the Clean Environment Fund in FY2002, EOEA and DEP were able to implement a much more extensive set of waste reduction programs than ever before. In FY2003, funding for waste reduction programs was cut dramatically from FY2002 levels, and DEP expects these funding cuts to continue into FY2004. Therefore, this document reports on an exceptional year for DEP's waste reduction programs. Looking ahead, DEP will continue to strive to develop innovative strategies that leverage limited resources to further reduce waste and protect public health and the environment.

¹ The economic indicator (Gross State Product) that DEP uses to calculate source reduction and the waste reduction rate will not be available until June 2003, therefore, this data cannot be issued before then.

This information is available in alternate format. Call April McCabe, ADA Coordinator at 1-617-556-1171. TDD Service - 1-800-298-2207.

Source Reduction

In the *Beyond 2000 Master Plan*, EOEa and DEP placed an increased emphasis on source reduction. Source reduction refers to the design, manufacture, purchase or reuse of materials to reduce the quantity of material that is generated. By minimizing the amount of materials produced and used in the first place, source reduction is the most environmentally preferable strategy for reducing waste disposal. In addition to reducing the burden on the waste disposal infrastructure, source reduction also reduces the burden on the recycling infrastructure and prevents the consumption of natural resources.

Many communities and businesses around the state have already undertaken source reduction efforts on their own. For example, newspapers such as *The Boston Globe* and others have reduced the size of the paper they use by more than 7% without minimizing content. EOEa and DEP have implemented additional programs to work with municipalities and businesses to expand on existing source reduction efforts. Recent accomplishments include:

- Municipalities sold more than 6,000 composting bins in FY 2002, bringing the statewide total to nearly 100,000 bins sold since 1994.
- In FY 2002, six municipalities began Pay-As-You-Throw (PAYT) programs in which residents pay more when they dispose more, providing an economic incentive for greater recycling and source reduction. There are currently 102 municipalities in the Commonwealth that have PAYT programs.
- The Massachusetts Materials Exchange (MME) connects businesses that have reusable materials to others that can utilize them. With extremely modest resources over the last several years, the MME has grown from a grassroots service into a web-based clearinghouse that not only reaches Massachusetts, but New England and beyond. This past fiscal year, a total of 26 matches took place in Massachusetts, keeping 33 tons of material from being disposed. Many of these matches were for furniture and office equipment for schools and non-profit organizations. In the past eight years, the Massachusetts Materials Exchange has moved over 2,000 tons of materials, saving participants more than \$100,000 in avoided purchasing and disposal costs.
- DEP distributed more than 25,000 junk mail reduction kits through municipalities. Of the nearly 1,500 response cards returned, 98 % of respondents reported sending in cards to take their names off of mailing lists, and more than half called toll-free numbers to have their names removed from mailing lists.

Product Stewardship

As envisioned in the *Master Plan*, Product Stewardship refers to the concept that all parties responsible for the design, production, sale, and use of a product assume responsibility for the full environmental impacts of the product throughout its life cycle. A key tenet of Product Stewardship is that manufacturers in particular should take greater responsibility for reducing product impacts. By placing greater responsibility for the end costs of products on manufacturers, product stewardship gives manufacturers strong economic incentives to change how they design and manufacture products, making them less toxic and more recyclable, and enabling consumers to make better informed purchasing choices by internalizing the costs of consumer products. Recent accomplishments include:

- Massachusetts' longest standing product stewardship initiative is the bottle bill, which places deposits on beverage containers and requires retailers and distributors to take back the containers they sell for recycling. The bottle bill has helped Massachusetts achieve high recycling rates for the beer and soda containers covered under the bottle bill.
- The Department of Revenue (DOR) Interagency Service Agreement (ISA) provides money from EOEA to DOR to hire staff to conduct audits on the abandoned deposits paid by beverage distributors. The money from these deposits that are not redeemed is required to be deposited in the Clean Environment Fund to pay for recycling and waste reduction programs. FY2002 was the third year of the ISA and the audits uncovered up to \$3 million of deposits owed to the CEF from three distributors outside of the State, including as much as \$2 million from one distributor that has never paid deposits.
- EOEA and DEP supported the creation of the Product Stewardship Institute (PSI) at the University of Massachusetts at Lowell in FY2001. This national Institute assists Massachusetts and other states across the country in promoting environmentally sound product management and design, and supports negotiations with industry to reach cooperative agreements to reduce the health and environmental impacts from consumer product manufacture, use, storage, and disposal. Since its inception through June 2002, PSI membership has grown to 24 state agencies and 22 local agencies. The national media has recognized PSI for its knowledge and involvement in product stewardship initiatives.
- PSI is completing an EPA-funded project to provide advice to state and local purchasing officials on buying environmentally preferable computers, and has begun work on model state electronics product stewardship legislation.
- Massachusetts participates with the PSI in the National Electronics Product Stewardship Initiative (NEPSI). PSI coordinates the participation of over twenty states in this dialogue, including Massachusetts. NEPSI engages the electronics industry in a product stewardship dialogue that aims to increase the collection, reuse, and recycling of used electronics and to develop a sustainable financing system to reach those goals.
- Massachusetts signed the National Carpet Product Stewardship Agreement in January 2002 after participating in negotiations with stakeholders from the carpet industry and federal, state, and local agencies. The agreement includes three major components:
 - A ten-year schedule (through 2012) for reducing land disposal of carpet and increasing recycling and reuse. This includes the following specific national goals:
 - Reusing a minimum of 3-5 percent of carpet before it enters the waste stream (The current reuse rate for carpet is 0 percent.)
 - Recycling a minimum of 20-25 percent of carpet (The current national carpet recycling rate is 3 percent.)
 - Disposing of no more than 40 % of carpet at a landfill or at an incinerator without energy recovery.
 - Disposing of no more than an additional 1 % of carpet at a waste-to-energy combustion facility.
 - Commitments by states to develop and promote uniform environmentally preferable procurement specifications for carpet.
 - Establishment of a third-party industry-led and funded carpet reclamation organization, Carpet America Recovery Effort (CARE). This third-party organization will develop the

infrastructure for collecting used carpet and identify roles for industry and state and local governments. The third-party organization will be responsible for meeting the goals of the Agreement.

- The Agreement involves the following commitments for Massachusetts:
 - Work with other states to develop final EPP carpet procurement specifications.
 - Participate in workgroup meetings and conference calls to advise the third-party organization in developing the carpet reclamation infrastructure.
 - Conduct oversight and due diligence related to the rates and dates for carpet reclamation that the industry is agreeing to.
- Learn more about the Agreement at: <http://www.moea.state.mn.us/carpet/mou.cfm>
- Massachusetts has participated in work by the Northeast Waste Management Officials Association (NEWMOA) and the Council of Northeast Governors (CONEG) to develop model mercury products legislation that includes provisions such as product phase-outs, product labeling, and recycling and collection programs. Already, legislation has passed in Massachusetts that bans the sale of mercury-containing thermometers.
- As part of its environmentally preferable purchasing programs, the Massachusetts state purchasing agency, the Operational Services Division, has worked with product manufacturers and distributors to establish take-back provisions as part of several state purchasing programs, including carpet and computers.
- More than 80 Massachusetts municipalities collect paint on a permanent basis and many send it to Ontario, Canada, to be recycled for \$3-4/container. The Product Stewardship Institute teamed up with Benjamin Moore and DEP last spring to start a pilot take-back of surplus Benjamin Moore latex paint at permanent paint collection sites in five Massachusetts municipalities. The communities had all previously received sheds to store paint as part of a DEP grant so they had the infrastructure necessary to participate in the pilot. Approximately 1,000 cans containing 256 gallons of paint were collected. Of this amount, about 240 gallons were remixed back into new paint at the Benjamin Moore Milford plant, saving the five communities approximately \$4,000. The pilot program was the nation's first paint take-back program and based on a recent evaluation, the program is likely to expand next year to additional permanent paint collection sites in Massachusetts, as well to permanent collection sites in one or two other New England states.

Hazardous Products Collection Programs

In addition to establishing a waste reduction goal for reducing the amount of materials that we dispose, the *Master Plan* also establishes goals related to reducing the toxicity of the wastestream. The goal established in the *Master Plan* is to: "Substantially reduce the use and toxicity of hazardous products and provide convenient collection services to all residents and very small quantity hazardous waste generators."

Progress towards this goal and related efforts to reduce the toxicity of the Commonwealth's waste stream are summarized in this section.

- To date, 253 municipalities representing nearly 85% of Massachusetts' population have established convenient collection programs for recycling or safe disposal of household hazardous products. For this purpose, the following services are defined as constituting convenient collection:

- have a local, permanent, comprehensive HHP collection center or participate in a regional center (within a 30 minute drive);
 - participate in at least three reciprocal HHP collection events per year (within a 30 minute drive);
 - hold at least three local one-day HHP collection events annually; or
 - collect at least three categories of high volume hazardous products (automotive products, paint products, mercury containing items and cathode ray tubes (CRTs)) on a regular basis **and** hold one comprehensive one-day collection annually
- As part of a multi-agency initiative, EOEa and DEP implemented solid waste related components of the state's Mercury Elimination Strategy. From January 2000 to April 2002, an estimated 2.16 tons of mercury was collected and diverted from solid waste disposal through a range of programs. The greatest results came from a Massachusetts Dental Association Program aimed at collecting bulk mercury from dental offices. This accounted for 51 percent of the total mercury collected. 42 percent of the mercury collected came through activities implemented under the Material Separation Plans of five municipal waste combustion facilities. Other efforts include municipal mercury collection programs, as well as working with hospitals and schools to clean out and reduce use of mercury products.
- In FY2002, EOEa and DEP awarded 17 grants for universal waste collection sheds, 14 grants for paint storage equipment, and seven grants for used oil storage tanks. A total of 244 municipalities now have regular access to used oil collection (up 12% from FY2001), 168 provide regular access to paint collection (a 21% increase), and 246 provide regular access to mercury-bearing products collection (a 6% increase from the previous year).
- EOEa and DEP initiated a statewide thermometer exchange program in partnership with over 400 pharmacies. The program was successful at raising awareness on the dangers of mercury and resulted in the collection of over 100,000 mercury thermometers.
- In FY2002, DEP conducted trainings and workshops on Household Hazardous Products (HHP), which included two paint trainings, two mercury trainings and one school chemical management training. In addition, there were nine school chemical clean-outs. EOEa and DEP also convened the 9th annual HHP Forum in January 2002, which was attended by over 175 municipal officials.

Residential Waste Reduction

DEP and EOEa supported a variety of programs to increase residential waste reduction, including grants, educational programs, and technical assistance to cities and towns. DEP also provided grants to support the continued operation of redemption centers.

- In FY2002, DEP and EOEa distributed \$2.4 million in payments to 198 municipalities under the Municipal Recycling Incentive Program (MRIP), which provides performance-based grants to municipalities that demonstrate an increasing commitment to recycling over time. Since 1998, 270 communities have received over \$11.6 million in MRIP payments. In its most recent six-month phase, municipalities achieved a 2% tonnage increase compared with the preceding year. Municipalities that have participated continually since 1998 have increased their recycled tonnage by 24%.
- In FY2002, DEP and EOEa awarded \$3.2 million in recycling grants to 196 municipalities. Since 1990, DEP and EOEa have awarded over \$22 million in recycling grants to a total of 259

municipalities. These grants include money for equipment for general recycling, computer and television recycling, composting, household hazardous products collection equipment, new Pay-As-You-Throw programs, and recycling education materials.

- DEP and EOEA coordinated a recycling promotional campaign with the New England Patriots in Fall 2001. This campaign was followed by a locally-targeted participation campaign in which DEP distributed over \$600,000 of educational and outreach materials to over 180 municipalities. The materials distributed included customized direct mail pieces explaining community specific recycling information, truck signs, sandwich boards, banners, informational hand-cards, recycling prompts and other recycling promotion tools (e.g., Public Service Announcements, press releases, etc.).
- DEP and EOEA provided grants to 53 communities to perform solid waste planning activities, including business recycling assistance and recycling contract consulting services, as well as other technical assistance designed to increase residential waste reduction.
- DEP and EOEA awarded cathode ray tube (CRT) recycling grants to 24 municipalities to help defray the cost of recycling CRT containing devices. A total of 184 municipalities have received a CRT recycling grant since 1999. Since the CRT disposal ban went into effect in April 2000, municipalities have recycled over seven million pounds of CRTs through DEP grants and 284 municipalities have now established CRT recycling programs.
- DEP and EOEA provided 39 municipalities with multi-family recycling equipment, enabling recycling collection at large apartment and housing complexes. This represents more than a 50% increase in grants for multi-family recycling equipment from FY 2001.
- From July 2001 through June 2002, DEP distributed over two million customized direct mail pieces to 161 municipalities informing residents on how to participate in their municipal recycling program. This represents a 26% increase in the number of municipalities assisted from the previous fiscal year.
- DEP provided educational presentations on solid waste and recycling issues to approximately 27,000 students in Massachusetts's K-12 public schools. This includes eighty-six school assemblies with entertaining educational content performed for over 17,300 students. In addition, over 400 classroom presentations were conducted on such topics as household hazardous waste, composting, and recycling, reaching almost 10,000 students. Furthermore, sixty teachers attended four DEP-sponsored training sessions for including environmental issues in their curriculums.
- DEP implemented a school Green Team campaign in April and May 2002. DEP developed waste reduction educational materials and delivered them through a Green Team web site. Teachers were encouraged to participate with their students and prizes were awarded to twenty classrooms with outstanding participation. Seven hundred classes participated in the program, representing approximately 47,000 students. After learning about ways to reduce, reuse, compost, and recycle their waste, students and their parents took a recycling pledge and tracked their household's waste disposal for a month. This campaign has been continued in FY03.
- 289 municipalities have obtained Department Approved Recycling Program (DARP) status, which means that they have met minimum criteria demonstrating their commitment to recycling

and composting. Beginning July 1, 2002, the criteria for inclusion in the DARP program became more rigorous and pushed municipalities to strengthen their recycling programs.

- DEP conducted extensive outreach and workshops in the spring and summer of 2002 resulting in approximately \$10 million in FY 2003 grant applications. However, due to FY2003 budget cuts, DEP will only be able to award limited amounts of FY2003 grants.
- DEP and EOEa increased redemption center grants by one-third more than last year, distributing \$1,369,000 in grants to 55 redemption centers to support the continued success of these operations and the Bottle Bill.

Commercial Waste Reduction

- In FY2001, DEP and EOEa funded the development of small business recycling cooperatives that focused on paper, cardboard, and food residuals collection. Many recyclers would not service small businesses because it is not economically feasible for them. However, setting up “milk runs” with a number of smaller businesses in the same location makes it feasible for the recycler. In FY2002, an estimated 2,000 tons of cardboard, paper and organics was diverted to recycling through the creation of these cooperatives. Of the twelve initial participants, nine are still operating and five of the twelve have been incorporated into municipal programs or have been taken over by a recycler.
- In FY2002, DEP and EOEa funded grants to eight municipalities to plan, pilot, and set up new business recycling programs, or expand existing programs in the towns of Arlington, Boston, Concord, Devens, Needham, South Hadley, Waltham, and Wellesley. Targeted materials included cardboard, paper and food residuals.
- DEP implemented a pilot Resource Management (RM) Contracting Pilot Project. RM contracts are designed to align customer and contractor objectives by providing opportunities for the contractor to profit from increased resource efficiency through prevention, recycling, and recovery of waste materials.
 - In Phase 1, DEP assessed the potential for 9 companies or institutions to implement RM contracting. Initial results showed that this approach has the potential to divert disposal tonnage by an average of 20-44% and save an average of 13-48% on waste management costs.
 - Four companies and institutions have signed a Memorandum of Understanding to participate in Phase II. In this phase, DEP is providing direct contracting assistance to participants to develop a RM contract and take that contract out to bid. Phase II participants will be monitored throughout the year.
- In FY2002, work continued on the Northampton Food Residuals Composting project. This project piloted restaurant food collection and composting. Twenty-one businesses are currently composting, including two produce stores, ten restaurants, six public schools, two universities and one hospital. Total diversion is now estimated at 110 tons per year. The Northampton project will be expanded in FY2003 to include approximately 10 businesses from Amherst. It is expected that this will add an additional 50 tons of food waste diversion annually.
- DEP worked with supermarkets to set up food waste composting programs at more than 25 supermarkets in the past year, helping the supermarkets to reduce their waste management costs, while increasing diversion.

Recycling Market Development Programs

As part of DEP and EOE's strategy to increase recycling and reuse, the agencies have made significant investments in the state's waste reduction infrastructure by providing support to municipalities, consumers, and businesses. Many of the materials generated and collected in Massachusetts face market challenges due to economic and technical barriers. DEP and other state agencies have addressed the barriers associated with market development for materials through an array of financial and technical assistance programs.

- DEP provided seed funding to WasteCap to participate in the Recycled Products Purchasing Cooperative (RPPC) as the New England affiliate. The RPPC was founded in 1999 in California. Its mission is to increase the use of recycled paper and other office supplies by purchasing them in large quantities as a cooperative, thus reducing the price. In the last fiscal year, the 63 Massachusetts companies participating in the RPPC bought 6,727 cases of recycled content paper. The paper contained 30% post-consumer recycled content. The environmental benefits of using this paper versus paper made from virgin materials are: saving 350,000 pounds of virgin wood, preventing 105,829 pounds of greenhouse gases entering the atmosphere, and avoiding 54,500 pounds of solid waste, 187 pounds of volatile organic compounds and 514,343 gallons of waste effluent.
- Since the *Beyond 2000 Master Plan* was published, five new loans have been disbursed from the Recycling Loan Fund, totaling over \$1.2 million in assistance to recycling processors and manufacturers. Since 1996, the Recycling Loan Fund has provided 21 loans totaling \$3.9 million, leveraging approximately \$15.6 million in private and public investments.
- The Legislature authorized and directed DEP to establish and administer the Recycling Industries Reimbursement Credit (RIRC) grant program to help overcome barriers to recycling or reusing materials and products. The program seeks to provide funds to recycling companies for capital equipment and pilot projects to overcome barriers to establishing or increasing the use of difficult-to-recycle materials and to create sustainable markets for these materials and encourage their recovery. In the last fiscal year, the program provided 13 recycling processing and manufacturing companies with \$837,000 in grants, leveraging over \$2,255,000 in private investments and resulting in an estimated processing of approximately 53,000 tons of recyclable materials. Some of the projects that were funded in FY2002 include;
 - Architectural Timber and Millwork of Hadley expanded its processing facility to manage and store more used building materials that it has salvaged from construction and demolition projects. The expansion project is expected to divert an additional 1,200 tons per year of used building materials. The \$50,000 grant was matched with \$500,000 of private funds.
 - Martin's Farm of Greenfield is a registered on-farm compost site that purchased a tub grinder to expand its capacity to process an additional 408 tons per year of food waste from grocery stores and restaurants. The \$100,000 awarded by the RIRC program was matched with \$325,000 of private funds.
 - SelectTech of Taunton purchased a mold for a new floor-tile product. The mold will enable the reuse of ground up whole carpet by sandwiching it as a cushion in between two layers of plastic. The project is expected to divert an additional 925 tons per year of discarded carpet. The \$70,000 grant was matched with almost \$400,000 of private funding.

- In FY2002, the State-owned Springfield Materials Recovery Facility (MRF) processed 13,256 tons of commingled containers and 35,396 tons of mixed paper from 94 communities in western Massachusetts. Since the MRF first opened in 1990, it has processed more than one billion pounds of recyclables.
- The Chelsea Center for Recycling and Economic Development was established by the Commonwealth in 1995 to create jobs, support recycling efforts, and help the economy and the environment by working to increase the use of recyclables by manufacturers. The Massachusetts program was nationally recognized for its work in February of 2002 at the National Recycling Coalition's (NRC) annual meeting. The Chelsea Center was given the Outstanding Market Development Award which recognized the Chelsea Center for its comprehensive outreach, education and assistance services which support manufacturers, municipalities, community development corporations, non-profits organizations, university researchers and others in the development of markets for materials which would otherwise end up in disposal facilities.
- The Operational Services Division (OSD) is responsible for coordinating the Commonwealth of Massachusetts' efforts to increase State purchases of environmentally preferable products (EPP), including goods that minimize waste, conserve energy and water, are made of fewer toxic materials, conserve natural resources, protect open space, and minimize impacts to public health. There are two staff positions at the state's OSD focused on the Environmentally Preferable Purchasing Program. Currently, all Commonwealth agencies are using 30% post-consumer recycled content paper for envelopes and in the paper for all printing needs (including the state lottery tickets.) Every year, this saves over 20,000 trees, over 5kWh of energy, over nine million gallons of water, and over four thousand cubic yards of landfill space.
- The Commonwealth spent over \$86.8 million in FY 2001 on environmentally preferable products (\$68.8 million on total Recycled Product Purchases and \$18 million on other EPP Purchases (e.g. energy efficient office equipment, EPP cleaners, etc.)), an increase of 43% since FY2000, and has made available or required in state contracts hundreds of recycled products, ranging from paper to motor oil, carpeting, and plastic park benches.
- Because of these efforts, Massachusetts was recognized as a national EPP purchasing leader in the September/October issue of *E Magazine*².
- In addition to encouraging state purchases of environmentally preferable products, the OSD Buy Recycled Awards Program recognizes outstanding State agencies, municipalities and schools, as well as environmentally committed businesses, which successfully implement effective strategies for closing the recycling loop. The awards are presented annually at the Buy Recycled and EPP Vendor Fair and Conference. In FY2002, the following entities received awards for their work in the previous year:
 - The buy-recycled program in the town of Dartmouth grew by leaps and bounds by increasing its buy recycled purchases 300% and has one of the most comprehensive buy recycled tracking systems in the state.
 - South Hadley was very active in testing new and innovative products including environmentally friendly field marking paint, sports bottles, re-refined motor oil and recycled plastic traffic cones. South Hadley was also able to boast the inclusion of every town department, including the schools.

² p. 30, September/October issue of *E Magazine*, "Buying Green; Harnessing the Incredible Procurement Power of Governments, Hospitals, Colleges and America's Biggest Corporations to Protect the Environment," by Jim Motavalli and Josh Harkinson.

- The Metropolitan District Commission (MDC) was presented with the award for Most Innovative Program for its environmental restoration project of non-functional fish ladders on the Lower Charles River as a key to restoring fish migration routes and maintaining a healthy river ecosystem. The MDC sought assistance from the Tri-County Vocational High School in Franklin for construction of all 77 fish baffles, utilizing recycled plastic lumber in the construction of 23 of these baffles to eliminate the potential leaching of toxins from alternatives (pressure treated lumber) into the water.
 - Conigliaro Industries was given an award for addressing the Commonwealth's need for the beneficial use of recycled plastics by manufacturing Plas-Crete blocks – a product that replaces the stone aggregate in concrete with recycled mixed plastic aggregate (#s 3-7). These blocks have hundreds of uses including storage facility and retaining wall construction. They are also half the weight of comparable concrete blocks, easing constraints on transportation and assembly.
 - New England Office Supply (NEOS) was also honored for its leadership and commitment as a Commonwealth provider under state contract. NEOS excelled in increasing the number of recycled content office supply goods available on the contract and in making every effort to use those materials in their own operations. Several catalog products NEOS offers are made from 100% recycled material, which far exceeds the state contract environmental criteria.
- In FY 2002, municipalities participating in MRIP spent over \$5.8 million dollars on recycled content products, an average of more than \$1.50 per resident in the towns that reported. Reported purchases have more than doubled since the information was first collected in 1998, when municipalities reported \$2.8 million dollars in recycled product purchases. 308 municipalities have adopted buy-recycled policies, largely as a result of recycling grant and Municipal Recycling Incentive Program criteria.

C&D and other Non-MSW Management Initiatives

- In April 2002, DEP reconvened the Construction and Demolition (C&D) Subcommittee of the Solid Waste Advisory Committee to provide input to DEP's program and policy discussions on establishing a disposal ban on certain categories of C&D debris and to achieve our goal of 88% C&D waste reduction in 2010.
 - The committee categorized barriers into three major groups: source separation, processing capacity and market development.
 - The C&D Subcommittee is recommending to DEP a strategy that phases in banning the disposal of specific materials over time. DEP is currently reviewing the C&D Subcommittee's recommendation and is preparing draft regulations and guidance for public comment later this spring.
- DEP awarded five technical assistance grants totaling \$130,000 to improve collection and sorting processes for C&D debris.
- Working with its C&D Subcommittee, DEP conducted five pilot projects to learn more about how to increase source separation of C&D materials from different types of construction and demolition sites. Fact sheets on these projects will be prepared this spring.

Waste Ban Enforcement

- DEP regulations ban the disposal of a number of recyclable materials, including leaves and yard waste; lead-acid batteries; whole tires at landfills; white goods (e.g., large appliances); paper and cardboard; metal, glass, and plastic containers; and cathode-ray tubes (e.g., from televisions and computer screens).
- In FY2002, four newly-hired regional waste ban inspectors conducted 356 inspections.
 - A total of 148 solid waste transfer stations, landfills and combustion facilities were inspected.
 - Enforcement actions were taken at 26 facilities, including three cases of higher-level enforcement.
 - Two Administrative Consent Orders with Penalties were issued -- one to a municipal transfer station with \$3,000 in suspended penalties and one to a commercial transfer station with a \$14,250 penalty.
 - Several facilities submitted improved waste ban compliance plans "in lieu of enforcement."
 - By the end of FY2002, 82% of the facilities inspected were found to be in compliance.
- DEP also is working to educate businesses that repeatedly send unallowable amounts of banned material to solid waste facilities about the waste bans by sending out notification letters and meeting with companies to assist them in improving their recycling programs.

Regulatory and Policy Changes and Development

In FY2002, DEP:

- Established a policy for a program for the management of "sharps" (e.g., hypodermic needles) generated from certain non-commercial sources to pilot an alternative way to collect sharps produced by citizens during home health care activities.
- Drafted proposed modifications to the Solid Waste Management Facility Regulations, 310 CMR 19.000 to:
 - Establish double liner standards for landfills,
 - Add certain C&D wastes to the list of banned materials,
 - Revise the Beneficial Use Determination (BUD) standards and process,
 - Incorporate the site assignment criteria for risk evaluation,
 - Eliminate old transitional sections of the regulations that are no longer needed, and
 - Eliminate the requirement that MSW combustor ash must be disposed in mono-fills or ash-only landfills.
- After extensive discussions with our Recycling Benefits Plan Subcommittee, decided not to proceed with the development of regulations for Recycling Benefits Plans at this time. Instead, we will explore other strategies to expand the role that the solid waste industry plays in recycling and waste reduction.
- Issued Revised Guidelines for Determining Closure Activities at Inactive Unlined Landfill Sites;
- Issued Interim Guidance on Double Liner Requirements for all Landfill Authorizations to Construct (ATC) Issued After December 20, 2000;
- Promulgated the Recycling Industry Reimbursement Credit regulations; and
- Promulgated regulations for upland management of dredged materials.

Unlined Landfill Closures – Completed the Central Artery/Tunnel Financial Assistance program to fund closure of unlined municipal landfills. Through this grant program, 38 municipalities received \$5 million in funding to support the closure of 333 acres of unlined landfills. In addition, clay from the Central Artery construction was made available to municipalities for landfill closure purposes.